AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) A method of providing data transmission across a public computer network, the method comprising:

creating a plurality of tunnels across the public computer network to facilitate a link aggregation between ~~connect~~ a first computer at a first site and [[to]]a second computer at a second site, the plurality of tunnels including a tunnel for each link in the [[a]]link aggregation, said link aggregation implemented through the use of a plurality of transmission protocols ~~capable of simultaneously supporting a plurality of transmission protocols~~;

creating a point to point connection between ~~connecting~~ the [[a]]first computer ~~at a first private network with~~ and the [[a]]second computer ~~at a second private network~~, the connection made in part via the tunnels created across the public computer network; and

transmitting packets end-to-end from the first computer to the second computer, the packets conforming to protocols in the plurality of transmission, in such a manner ~~characterized~~ that data is transmitted from the first computer to the second computer without terminating the connection from the first computer to the second computer at a switch at an inbound edge of the public computer network~~, the packets conforming to protocols in the plurality of transmission protocols~~.

2.   (Original) The method of claim 1, wherein the plurality of transmission protocols comprises LACP protocol, and packets are transmitted in accordance with the LACP protocol to perform Ethernet loadsharing across multiple links.

3.   (Original) The method of claim 1, wherein the plurality of transmission protocols comprises PAgP protocol, and packets are transmitted in accordance with the PAgP protocol to perform Ethernet loadsharing across multiple links.

4.   (Original) The method of claim 1, wherein the plurality of transmission protocols comprises UDLD protocol, and packets are transmitted in accordance with the UDLD protocol to perform unidirectional link detection.

5.   (Previously Presented) The method of claim 1, wherein a unique ISP access VLAN is

assigned to each connection between corresponding link aggregation ports.

6.   (Currently Amended) The method of claim 1, further comprising monitoring the computer network to detect multipoint protocol tunneling, wherein multipoint protocol tunneling comprises the presence and participation of one or more additional entities in a protocol exchange that is meant to occur between two end points.

7.   (Original) The method of claim 6, wherein the monitoring is performed on a per-interface basis.

8.   (Original) The method of claim 6, wherein the monitoring is performed by examining a source media access control address on a transmitted protocol data unit.

9.   (Original) The method of claim 8, wherein the source media access control address is recorded as a multipoint protocol tunneling reference, and an aging timer is set to a minimum time that is longer than a longest expected transmission time for the transmitted protocol data unit.

10.   (Original) The method of claim 9, wherein, before expiration of the aging timer, all packets arriving with a source media access control address other than the reference are dropped.

11.   (Original) The method of claim 9, wherein, after expiration of the aging timer, the first packet arriving after expiration of the aging timer provides its source media access control address as the next multipoint protocol tunneling reference.

12.   (Original) The method of claim 6, wherein a report is generated upon detection of multipoint protocol tunneling.

13.   (Original) The method of claim 6, wherein multipoint protocol tunneling detection is performed on a per-protocol basis.

14.   (Original) The method of claim 6, wherein multipoint protocol tunneling detection is performed on a per-port basis.

15.   (Currently Amended) A computer program product containing instructions which, when executed by at least one computer, provides data transmission across a public computer network by performing the acts of:

creating a plurality of tunnels across the public computer network to facilitate a link aggregation, the plurality of tunnels including a tunnel for each link in the [[a]]link aggregation,

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said link aggregation <u>implemented through the use of a plurality of transmission protocols</u> ~~capable~~ ~~of simultaneously supporting a plurality of transmission protocols~~;

    <u>creating a point to point connection between</u> ~~connecting~~ a first computer at a first <u>site</u> ~~private network~~ with a second computer at a second <u>site</u>~~private network~~, the connection made <u>in part</u> via the tunnels created across the public computer network; and

    transmitting packets end-to-end from the first computer to the second computer<u>, the packets conforming to protocols in the plurality of transmission,</u> in <u>such</u> a manner ~~characterized~~ that data is transmitted from the first computer to the second computer without terminating the _connection from the first computer to the second computer at a switch at an inbound edge of the public computer network~~, the packets conforming to protocols in the plurality of transmission protocols~~.

16.   (Original) The product of claim 15, wherein the plurality of transmission protocols comprises LACP protocol, and packets are transmitted in accordance with the LACP protocol to perform Ethernet loadsharing across multiple links.

17.   (Original) The product of claim 15, wherein the plurality of transmission protocols comprises PAgP protocol, and packets are transmitted in accordance with the PAgP protocol to perform Ethernet loadsharing across multiple links.

18.   (Original) The product of claim 15, wherein the plurality of transmission protocols comprises UDLD protocol, and packets are transmitted in accordance with the UDLD protocol to perform unidirectional link detection.

19.   (Previously Presented) The product of claim 15, wherein a unique ISP access VLAN is assigned to each connection between corresponding link aggregation ports.

20.   (Currently Amended) The product of claim 15, further comprising monitoring the computer network to detect multipoint protocol tunneling<u>, wherein multipoint protocol tunneling comprises the presence and participation of one or more additional entities in a protocol exchange that is meant to occur between two end points</u>.

21.   (Original) The product of claim 20, wherein the monitoring is performed on a per-interface basis.

22.   (Original) The product of claim 20, wherein the monitoring is performed by examining a

source media access control address on a transmitted protocol data unit.

23. (Original) The product of claim 22, wherein the source media access control address is recorded as a multipoint protocol tunneling reference, and an aging timer is set to a minimum time that is longer than a longest expected transmission time for the transmitted protocol data unit.

24. (Original) The product of claim 23, wherein, before expiration of the aging timer, all packets arriving with a source media access control address other than the reference are dropped.

25. (Original) The product of claim 23, wherein, after expiration of the aging timer, the first packet arriving after expiration of the aging timer provides its source media access control address as the next multipoint protocol tunneling reference.

26. (Original) The product of claim 20, wherein a report is generated upon detection of multipoint protocol tunneling.

27. (Original) The product of claim 20, wherein multipoint protocol tunneling detection is performed on a per-protocol basis.

28. (Original) The product of claim 20, wherein multipoint protocol tunneling detection is performed on a per-port basis.

29. (Currently Amended) A computer network for connecting computers at different private networks with each other, the computer network comprising:
    means for creating a plurality of tunnels across the public computer network to facilitate a link aggregation, the plurality of tunnels including a tunnel for each link in the [[a]]link aggregation, said link aggregation implemented through the use of a plurality of transmission protocols capable of simultaneously supporting a plurality of transmission protocols;

    means for creating a point to point connection between connecting a first computer at a first site private network with a second computer at a second siteprivate network, the connection made in part via the tunnels created across the public computer network; and
    means for transmitting packets end-to-end from the first computer to the second computer, the packets conforming to protocols in the plurality of transmission, in such a manner characterized that data is transmitted from the first computer to the second computer without terminating the connection from the first computer to the second computer at a switch at an

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inbound edge of the public computer network~~, the packets conforming to protocols in the~~ ~~plurality of transmission protocols~~.

30.   (Currently Amended) The method of claim 1, wherein said plurality of tunnels is formed in part by adding an outer VLAN tag to each packet at the inbound edge of the public computer network and removing the outer VLAN tag at an outbound edge of the public computer network, the outer VLAN tag corresponding to a tunnel <u>and, for each of the plurality of tunnels,</u> <u>comprising a different VLAN value</u>.

31.   (Currently Amended) The computer program product of claim 15, wherein said plurality of tunnels is formed in part by adding an outer VLAN tag to each packet at the inbound edge of the public computer network and removing the outer VLAN tag at an outbound edge of the public computer network, the outer VLAN tag corresponding to a tunnel <u>and, for each of the</u> <u>plurality of tunnels, comprising a different VLAN value</u>.

32.   (Currently Amended) A method of providing data transmission across a public computer network, the method comprising:
        receiving, at a switch at an inbound edge of the public computer network, packets from a plurality of links between the switch and a first computer located at a first private computer network, wherein the <u>plurality of</u> links comprise a link aggregation;
        creating a plurality of tunnels across the public computer network <u>to facilitate a link</u> <u>aggregation, the plurality of tunnels including a tunnel for each link the link aggregation</u>;
        assigning each of the plurality of links a tunnel from among the plurality of tunnels;
        transmitting the packets from the first computer to a second computer at a second private network, a connection made between the first computer and the second computer across the public computer network via the created tunnels;
        wherein the packets are transmitted from the first computer to the second computer without terminating the connection from the first computer to the second computer at the switch at the inbound edge of the public computer network, such that a point to point connection is established between the first computer and the second computer for each link of the link aggregation.